



P A D O V A
neuroscience
C E N T E R

17 OCTOBER 2024 3:00 pm

SALA SEMINARI VIMM

(Via Giuseppe Orus 2, Padova)

PNC SEMINARS

A talk by Francesco Papaleo

(Istituto Italiano di Tecnologia – IIT, Genoa)

CIRCUITS OF EMOTION RECOGNITION

The way we perceive, process, and react to others' emotional states (Emotion Recognition) is at the core of all animal interactions, playing a central role not only in our daily lives and well-being, but also in shaping societies. Determining the mechanisms underpinning emotion recognition will significantly advance our understanding of how individuals engage with others and the role of the social brain in health and disease. We recently developed and validated a series of innovative paradigms for mice that allow disentangling previously unexplored cell- and circuit-specific mechanisms of emotion recognition. Deploy these innovative translational socio-cognitive assessments in mice complemented by state-of-the-art genetics, single-cell imaging, and optogenetics tools we are starting to uncover evolutionary conserved substrates of emotion recognition. A special focus of our investigations is on the prefrontal cortex (PFC)-centered circuits.

Biography

Francesco Papaleo is Tenured Senior Researcher at the Istituto Italiano di Tecnologia, Genoa branch, where he leads the Genetics of Cognition research group.

Francesco graduated in Pharmacy at the University of Padua in 2001, where he also obtained his PhD in Pharmacology and Toxicology in 2005 under the supervision of Dr. Angelo Contarino. He then moved to Bethesda, USA, where he was appointed as a Post Doctoral Fellow at the National Institute of Mental Health, NIH.

Since 2010 Francesco has been carrying out his research at the Istituto Italiano di Tecnologia, IIT, Genoa branch, Neuroscience Area, where he aims at uncovering the mechanisms underlying cognitive, social and socio-cognitive processes using cross-disciplinary approaches strictly combined with clinical investigations. He and his team are investigating the mechanisms of these functions in terms of genetics and brain circuits contributing factors. They are studying these processes in the context of psychiatric and neurodevelopmental disorders with the final goal of developing biologically-based and personalized therapeutic strategies.